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The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 36

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HIROYUKI DEGUCHI

Appeal No.1998-0688
Application 08/274,158¹

Heard: May 2, 2000

Before BARRETT, FLEMING, and DIXON, **Administrative Patent**

Judges.

FLEMING, **Administrative Patent Judge.**

DECISION ON APPEAL

¹ Application for patent filed July 14, 1994. According to Appellant, this application is a continuation of Application No. 07/737,062, filed July 29, 1991, now abandoned.

This is a decision on appeal from the rejection of claims 1, 4, 6 through 12, 15, and 17 through 27. Claims 2, 3, 5, 13, 14, and 16 have been canceled.

Appellant's invention is generally directed to an image processor for detecting documents and in particular, to the surface optical properties of the document covering means that covers the documents. As disclosed on page 12 of the specification, different components of the image processor, such as the transparent plate, the document covering means, and the image sensor, are the same as those in conventional copy machines. The disclosure on pages 7 and 8 teaches that the contrast and copying quality is decreased for a regular reflectance of the document covering surface of less than 1.5% when the document is transparent. Additionally, the copying quality is taught to be inferior in the case of an irregular reflectance of the document covering surface of more than 40% when the document has dark solid portions. Appellant on pages 6 and 12 of the specification teaches that for uniform copying quality, the lower surface of the document covering means has a regular reflectance of 1.5% to 40% and an irregular reflectance intensity of N4 to N8.5 in the Munsell color

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system. Representative independent claim 1 is reproduced
as follows:

1. An image processor comprising a transparent plate adapted to have a document placed thereon, document covering means for covering said transparent plate and the document thereon, document illumination means adapted for movement relative to the document on said transparent plate, an image sensor for receiving light irregularly reflected from the document when illuminated by said document illuminating means, and document detecting means and for detecting the document-existing region of the transparent plate on the basis of an output signal from said image sensor, said document covering means having a substantially achromatic document covering surface with a regular reflectance of from 1.5 to 20% and giving a relative intensity of irregularly reflected light as received by said image sensor of from N4 to N8.5 in terms of lightness in the Munsell color system.

The Examiner relies on the following references:

Hosaka et al. (Hosaka)	4,811,047	Mar. 7, 1989
Sato et al. (Sato)	4,939,553	July 3, 1990
Nezu	4,963,934	Oct. 16, 1990
Miyamoto	5,036,354	July 30, 1991 (filed May 11, 1990)
Tanaka et al. (Tanaka) (Japanese Kokai)	58-111474	July 2, 1983
Yuse et al. (Yuse '265) (Japanese Kokai)	62-221265	Sept. 29, 1987
Yuse et al. (Yuse '266) (Japanese Kokai)	62-221266	Sept. 29, 1987

Claims 1, 4, 6, 7, and 9 stand rejected under 35 U.S.C.

§ 102 as being anticipated by Hosaka. Claims 10 through 12, 15, and 17 through 19 stand rejected under 35 U.S.C. § 103 over Hosaka and Sato. Claims 1, 4, 6 through 9, and 20 are rejected under 35 U.S.C. § 103 over Nezu, Yuse '266, and Yuse '265. Claims 10 through 12, 15, 17 through 19, and 21 are rejected under 35 U.S.C. § 103 over Nezu, Sato, Yuse '266, and Yuse '265. Claim 22 is rejected under 35 U.S.C. § 103 over Hosaka and Miyamoto. Claims 23 and 24 are rejected under 35 U.S.C. § 103 over Hosaka, Miyamoto, and Tanaka. Claim 25 is rejected under 35 U.S.C. § 103 over Hosaka, Sato, and Miyamoto. Claims 26 and 27 are rejected under 35 U.S.C. § 103 over Hosaka, Sato, Miyamoto, and Tanaka. Claim 22 is rejected under 35 U.S.C. § 103 over Nezu, Yuse '266, Yuse '265, and Miyamoto. Claims 23 and 24 are rejected under 35 U.S.C. § 103 over Nezu, Yuse '266, Yuse '265, Miyamoto, and Tanaka. Claim 25 is rejected under 35 U.S.C. § 103 over Nezu, Yuse '266, Yuse '265, Sato, and Miyamoto. Claims 26 and 27 are rejected under 35 U.S.C. § 103 over Nezu, Yuse '266, Yuse '265, Sato, Miyamoto, and Tanaka.²

² The rejections of claims 22 through 27 over different combination of references together with Miyamoto are new grounds of rejection included for the first time in the

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Rather than repeat the arguments of Appellant and the Examiner, we make reference to the briefs³ and the answers⁴ for the details thereof.

OPINION

After careful review of the evidence before us, we do not agree with the Examiner that claims 1, 4, 6, 7, and 9 are properly rejected as anticipated under 35 U.S.C. § 102. In addition, we do not sustain the rejection of claims 1, 4, 6 through 12, 15, and 17 through 27 under 35 U.S.C. § 103. Accordingly, we reverse.

Turning to the rejection of claims 1, 4, 6, 7, and 9 under 35 U.S.C. § 102 as anticipated by Hosaka, Appellant on pages 10 through 13 of the brief argues that the black color or the paint on Hosaka's document covering surface with a "small reflectance" is conventionally related to a reflectance

Examiner's answer mailed October 15, 1996.

³ Appellant filed an appeal brief on June 17, 1996. Appellant also filed a reply brief on December 16, 1996 which was acknowledged and entered by the Examiner with further comments in a supplemental answer.

⁴ The Examiner mailed a supplemental answer on March 3, 1997.

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of less than 1%. Appellant's declaration of April 15, 1996 filed under 37 C.F.R.

§ 1.132 provides support for such assertion. Appellant adds that Hosaka's "paint having a small reflectance" does not provide a grey surface having a relative intensity of irregularly reflected light of N4 to N8.5 as recited in claim 1. Appellant further points out that a "paint having a small reflectance" could be any paint and not necessarily a substantially achromatic paint. Additionally, Appellant on page 5 of the reply brief concludes that rather than how Hosaka's disclosure can be reasonably interpreted, one must look at whether a person skilled in the art would understand a "small reflectance" to be less than 1%.

The Examiner on page 14 of the answer responds to Appellant's arguments by stating that Appellant's position with regard to the reflectance of Hosaka's document cover surface, as stated in the declaration, is not conclusive of lack of such teaching. The Examiner further states that the disclosure of Hosaka can be reasonably interpreted to include a document covering surface having a reflectance of greater than 1%. The Examiner on page 19 of the supplemental answer

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adds that a skilled artisan finds a "small reflectance" to fall between 1.5% and 20%.

As pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." *In re Hiniker Co.*, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Claims will be given their broadest reasonable interpretation consistent with the specification, and limitation appearing in the specification are not to be read into the claims. *In re Etter*, 756 F.2d 852, 858, 225 USPQ 1, 5 (Fed. Cir. 1985).

We note that Appellant's claim 1 recites

said document covering means having a substantially achromatic document covering surface with a regular reflectance of from 1.5% to 20% and giving a relative intensity of irregularly reflected light ... of from N4 to N8.5 in terms of lightness in the Munsell color system [emphasis added].

Appellant's claim 1, in addition to the different elements of a conventional image processor, recites specific properties for the surface of the document cover. These properties include a substantially achromatic surface as well as a particular range for the regular reflectance and the irregularly reflected light intensity. We find that Hosaka in

col. 6, lines 27 through 30 discloses that the document cover is either black in color or a paint having a small reflectance. Hosaka further teaches that the document from the document cover surface is distinguished by comparing the reflected intensity from the document and the cover surface. To improve the copying contrast, Hosaka in col. 11, lines 5 through 62 teaches different steps of image processing in order to eliminate black frame. However, Hosaka does not disclose any particular range for the reflectance of the document cover surface or its affect on the copying quality for different types of documents.

"Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention."

RCA Corp. V. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), ***cert. dismissed***, 468 U.S. 1228 (1984)(***citing Kalman v. Kimberly-Clark Corp.***, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), ***cert. denied***, 465 U.S. 1026 (1984)). However, "[t]o establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing

described in the reference, and that it would be so recognized by person of ordinary skill.'" ***In re Robertson***, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-1951 (Fed. Cir. 1999)(***citing Continental Can Co. V. Monsanto Co.***, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991)). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result for a given set of circumstances is not sufficient." ***Id.*** at 1269, 20 USPQ2d at 1749.

In view of the analysis above, we find that the Examiner has failed to meet the burden of providing a ***prima facie*** case of anticipation. We find no clear and express teachings in Hosaka related to a substantially achromatic document covering surface with a regular reflectance of from 1.5% to 20% and a relative intensity of irregularly reflected light of from N4 to N8.5 as recited in Appellant's claim 1. Additionally, we disagree with the Examiner that Hosaka's document cover having a "small reflectance" can be reasonably interpreted to include a reflectance of greater than 1%. We find that the Examiner's analysis of Hosaka's disclosure to be merely speculative and based on prohibited probability and possibility. Accordingly,

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we reverse the rejection of claims 1, 4, 6, 7, and 9 under 35 U.S.C. § 102.

Turning to the rejection of claims 10 through 12, 15, and 17 through 19 under 35 U.S.C. § 103 over Hosaka and Sato, Appellant on page 9 of the brief provides the same arguments as pointed out with regard to claim 1. Appellant on page 10 further states that Hosaka's "paint having a small reflectance" would have a reflectance of less than 1% which is different from the 1.5% to 20% range as recited in independent claim 10.

We note that independent claim 10 includes a "document covering means having a substantially achromatic document covering surface." Additionally, the document cover surface has the same range of "regular reflectance of from 1.5% to 20%" and a "relative intensity of irregularly reflected light . . . of from N4 to N8.5 in terms of lightness in the Munsell color system" as recited in Appellant's claim 1.

It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such

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teachings or suggestions. *In re Sernaker*, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." *Para-Ordnance Mfg. v. SGS Importers Int'l, Inc.*, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), *cert. denied*, 519 U.S. 822 (1996) (*citing W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984)).

We are not inclined to dispense with proof by evidence when the proposition at issue is not supported by a teaching in a prior art reference or shown to be common knowledge of unquestionable demonstration. Our reviewing court requires this evidence in order to establish a *prima facie* case. *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984); *In re Knapp-Monarch Co.*, 296 F.2d 230, 232, 132 USPQ 6, 8 (CCPA 1961); *In re Cofer*, 354 F.2d 664, 668, 148 USPQ 268, 271-72 (CCPA 1966). Furthermore, our reviewing

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court states in *In re Piasecki*, 745 F.2d at 1472, 223 USPQ at 788 the following:

The Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1 (1966), focused on the procedural and evidentiary processes in reaching a conclusion under section 103. As adapted to *ex parte* procedure, *Graham* is interpreted as continuing to place the "burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under section 102 and 103" (*citing In re Warner*, 379 F.2d 1011, 1016, 154 USPQ 173, 177 (CCPA 1967)).

We find that, based on the foregoing analysis as related to claim 1, Hosaka does not teach an achromatic document covering surface having a regular reflectance of from 1.5% to 20% and a relative intensity of irregularly reflected light of from N4 to N8.5 in the Munsell color system as recited in Appellant's claim 10. Accordingly, we reverse the rejection of claims 10 through 12, 15, and 17 through 19 under 35 U.S.C. § 103 over Hosaka and Sato.

With regard to the rejections of claims 22 through 27, we note that claims 22 through 24 depend from claim 1 and claims 25 through 27 depend from claim 10. For the same reasons as discussed above, we reverse the rejection of claims 22 through

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27 under 35 U.S.C. § 103 over Hosaka and different combinations of Miyamoto, Sato, and Tanaka.

Turning to the rejection of claims 1, 4, 6 through 9, and 20 under 35 U.S.C. § 103 over Nezu, Yuse '265, and Yuse '266, and the rejection of claims 10 through 12, 15, 17 through 19, and 21 under 35 U.S.C. § 103 over Nezu, Yuse '265, Yuse '266, and Sato, Appellant on pages 14 through 16 of the brief argues that the document cover surface of Nezu has low reflectivity only in response to specific wavelengths. Appellant further points out that the grey surface of the document cover as disclosed by Yuse '265 and Yuse '266 does not inherently have a reflectance of between 1.5% and 20%.

The Examiner on page 17 of the answer responds to Appellant's arguments by asserting that the grey cover of Yuse '265 and Yuse '266 falls within the claimed range of reflectivity. The Examiner further states that since the document cover surface as recited in Appellant's claim 1 is grey, it has the same reflectivity of the grey surface of the prior art.

We note that both independent claims 1 and 10 recite a "document covering means having a substantially achromatic

document covering surface." Additionally, the document cover surface has a "regular reflectance of from 1.5% to 20%" and a "relative intensity of irregularly reflected light as received by said image sensor of from N4 to N8.5 in terms of lightness in the Munsell color system."

We find that Nezu in col. 7, lines 22 through 24 discloses that the surface of the document cover is light blue which has low reflectivity only with respect to radiation of red to orange light. However, Nezu is silent with regard to an achromatic document cover surface having a regular reflectance of 1.5% to 20% and an irregular reflectance intensity of N4 to N8.5 in the Munsell color system as recited in Appellant's independent claims 1 and 10. We further find that Yuse '265 and Yuse '266 on page 8 do specify some kind of grey for the surface of document cover. However, we find that neither Yuse '265 nor Yuse '266 requires any limits for the reflectance of the cover surface, and in particular, the regular reflectance of 1.5% to 20% and the irregular reflectance intensity of N4 to N8.5 as recited in Appellant's claims 1 and 10. We note that claims 22 through 24 and claims 25 through 27 depend from claims 1 and 10 respectively.

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Accordingly, we reverse the rejection of claims 1, 4, 6 through 12, 15, and 17 through 27 under 35 U.S.C. § 103 over Nezu, Yuse '265, Yuse '266 and different combinations of Sato, Miyamoto, and Tanaka.

In view of the forgoing, the decision of the Examiner rejecting claims 1, 4, 6, 7, and 9 under 35 U.S.C. § 102 and claims 1, 4, 6 through 12, 15, and 17 through 27 under 35 U.S.C. § 103 is reversed.

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REVERSED

LEE E. BARRETT)	
Administrative Patent Judge))	
)	
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MICHAEL R. FLEMING)	
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)	
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